

IN THE SPECIFICATION

Please substitute the following amended paragraphs for the corresponding original paragraphs.

At the paragraph starting on page 8, line 7:

Aside from forming the lower extremity of the enclosure 114, the dome 106 also defines a surface 212 that is external to the chamber processing environment that supports an RF antenna 210. Specifically, a single length of a conductor (i.e., a copper coil) is positioned at the circumference of the dome 106 and coiled radially inward. The antenna coil covers approximately 2/3 of the support surface 212. As can be seen in Figures 1-4, the antenna 210 is substantially non-vertical and covers at least a portion of the external surface 212 of the dome or ceiling 106 that substantially faces the substrate 110. The antenna 210 is coupled to a high power RF power source (not shown) for the purpose of passing RF energy through the ceiling 106 and thereby ionizing a process gas into a plasma in the process chamber 100. The antenna 210 and the RF source form a decoupled plasma source. Preferably, the dome 106 is opaque quartz or a ceramic such as alumina. Such materials are substantially transparent to infrared wavelengths that are produced by lamps within the temperature control unit. The heat produced by these emissions are used to heat the chamber environment. As such, the dome 106 is permeable to the magnetic fields and RF energy from the antenna 210 which control and enhance plasma characteristics. Proximate the apex 123 of the dome 104, the opening 122 is formed. As such, the beams from and to the collimating assembly 126 pass through the opening 122 and into and out of the process chamber 100.

At the paragraph starting on page 10, line 12:

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The above described apparatus is not limited to use inside an enclosure above a wafer process chamber. Nor does the window or opening in which the window is fitted need to be part of or affixed to a dome shaped top surface. The top surface may be partially dome-shaped, flat, concave or any configuration suitable for sealing the process chamber. The window 124 and opening 122 need not be at the apex of the dome or similar top surface as they can be off center. Additionally, there need not be only one window and corresponding opening. There may be a plurality of openings in the top surface each covered by a separate window or all covered by a single plate disposed above the top surface. In such a configuration having a plurality of openings and windows, there can be a single source providing illumination at all openings or a plurality of sources providing illumination to a group of openings or to each opening individually. Accordingly, there can be a single detector receiving reflected beams passing through all of the openings. Alternately, there can be a plurality of detectors receiving reflected signals from a group of openings or from each opening individually.